

## BIBLIOGRAPHICAL NOTICE.

*The Natural History of the Tineina.* By H. T. STANTON.  
Vols. VIII. and IX. 8vo. London: Van Voorst, 1864-1865.

WE have already repeatedly had occasion to notice, in terms of high praise, the appearance of the previous volumes of this excellent work; and we can hardly say more in favour of the two volumes which have appeared in the last two years, than that in every respect they maintain the reputation gained by their predecessors. As he approaches the end of the first stage of his journey (his first series of ten volumes), Mr. Stainton continues to devote to his task an unflagging zeal and industry which prove it to be to him a labour of love; and although, from the vastness of the design, we hardly dare hope that the author's energies will last long enough to enable him to complete the 'Natural History of the Tineina' on its present scale, every fresh volume that he issues will form one stone the more towards the construction of a monument which will preserve and adorn his memory for many years. And although we trust it may be long before his friends will need to be reminded by such a monument of his life and labours, we cannot but hope that the consideration thrown out above may at least serve as some inducement to him to persevere in the publication of the present work, each new volume of which (notwithstanding certain defects in its arrangement to which we have already more than once called attention) cannot but be received with pleasure by every entomologist. Independently of the exquisite beauty of the illustrations, it is no small gratification, in these days of slovenly work, to have to do with an author who honestly endeavours to tell us all about his subject, or at least to make his history of each object that comes under his treatment as complete as the existing state of knowledge will permit.

The first of the two volumes indicated at the head of this article contains the descriptions and natural history of fifteen species of *Gracilaria* and nine species of the allied genus *Ornix*, which with *Coriscium*, the distinctness of which from *Gracilaria* is doubted by Mr. Stainton, constitute the subfamily *Gracilariidæ*. Of the first-mentioned genus, *Gracilaria*, the author gives a list of forty-three known species, five of which inhabit North America, five have been brought from the neighbourhood of Calcutta, and three from Moreton Bay. The remaining thirty are European species; and of these, fifteen species are undoubtedly inhabitants of Britain. Of the latter, twelve are described and figured by Mr. Stainton in the volume before us. The larvæ of those whose transformations are known, twenty-two in number, feed upon plants belonging to a great variety of natural orders, among which, however, the Aceraceæ, Leguminosæ, and Amentiferæ are most conspicuous.

This is singularly in contrast with the state of matters in this respect in the genus *Ornix*, notwithstanding a close similarity both in the characters of the insects forming the two genera, and in the general habits of the larvæ. Here, out of twenty-two known species, the

larvæ of no fewer than seventeen have been discovered; and the food-plants of these belong exclusively to the two natural orders Rosaceæ and Amentiferæ, the former nourishing ten species, and the latter furnishing food for seven or eight. Of the twenty-two species, four are North American, the remainder are European; and of these, nine (or, again, exactly one half) are known to occur in Britain. Eight of the British species are treated of in the present volume, which thus includes the natural history of nearly the whole of the native forms of the two genera.

In his ninth volume Mr. Stainton enters upon the hardest portion of his task, namely the description of the enormous genus *Gelechia*, the most numerous in species of all the Tineina. The number of *British* species described by the author in the 'Insecta Britannica' was no less than ninety-five, and several have since been added to our native list; the European and exotic species are also very numerous. Under these circumstances, and considering the difficulty attendant on the grouping of such a multitude of nearly related forms, we can hardly wonder that Mr. Stainton has postponed his general considerations on *Gelechia* to his next volume, which, like the one now before us, will contain twenty-four species of the genus.

## MISCELLANEOUS.

*On the Chevreulius callensis of Lacaze-Duthiers.*  
By JOSHUA ALDER.

IN the 'Annales des Sciences Naturelles' for November last, M. Lacaze-Duthiers has given an interesting account of an Ascidian of a very peculiar structure, forming, in some respects, a connecting link between the Tunicata and the Lamellibranchiata. This animal the distinguished author conceives to be new and unique, and has therefore constituted for it a new genus under the name of *Chevreulius*. Of the great interest attached to this genus there can be no doubt; but M. Lacaze-Duthiers is mistaken in supposing that it is new to science, as it was described upwards of ten years ago (in July 1855), by Professor Stimpson, in the 'Proceedings of the Philadelphia Academy of Sciences,' under the name of *Schizascus*, and two species characterized, which he had met with in the Chinese seas. A specimen of one of these, *S. papillosus*, was kindly sent to me by that eminent naturalist. It bears a great resemblance to the figures given by M. Lacaze-Duthiers, differing principally in the papillose or echinated character of the valvular opening. A species apparently of the same genus was obtained in the Indian Ocean by Dr. Macdonald, who has also characterized it as a new genus, under the name of *Peroïdes*. This I only know through a paper of his in the 'Transactions of the Royal Society of Edinburgh' (vol. xxiii. p. 176), where it is stated to have "two apertures on the same plane, protected by a D-shaped opercular fold of the test common to both." It